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NATIONAL APPRENTICESHIP STANDARDS

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photoengravers

COMMERCIAL ESTABLISHMENTS

FORMULATED BY THE AMERICAN PHOTOENGRAVERS ASSOCIATION AND THE INTERNATIONAL PHOTO-ENGRAVERS' UNION OF NORTH AMERICA

in cooperation with

U. S. DEPARTMENT OF LABOR • BUREAU OF APPRENTICESHIP • WASHINGTON, D. C.

APPROVED BY

Executive Council International Photo-Engravers' Union of North America

EDWARD J. VOLZ, *President*
MATTHEW WOLL, *1st Vice President*
FRED R. BALLBACH, *2d Vice President*
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JUNE 10, 1949

American Photoengravers Association

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EVERETT BIERMAN
A. P. REGITZ

JUNE 10, 1949

Program registered as incorporating
the basic standards of the
FEDERAL COMMITTEE ON APPRENTICESHIP

WILLIAM F. PATTERSON, *Director*
Bureau of Apprenticeship
U. S. Department of Labor

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FOREWORD

In view of the high quality workmanship required in the photoengraving industry and the necessity to maintain at all times an adequate force of thoroughly trained craftsmen, the national standards of apprenticeship jointly sponsored and formulated by the American Photoengravers Association and the International Photo-Engravers Union of North America should meet a long-felt need.

The comprehensive, carefully planned standards adopted, which are based on the long experience of employers and labor in training apprentices in the wide variety of operations in the craft, should prove indispensable as a pattern in every locality in establishing uniform, well organized apprenticeship programs. The expansion of apprentice training activities resulting will, I am sure, be invaluable to the photoengraving industry in building up and maintaining an ample supply of competent, versatile craftsmen; and will provide opportunities for careers in a highly skilled occupation to the young men selected for the thorough training assured under the programs established.

Maurice J. Tobin

MAURICE J. TOBIN,
Secretary of Labor.

A GUIDE IN ESTABLISHING LOCAL APPRENTICESHIP SYSTEMS

The Art Preservative of All Arts—Printing—requires, among other processes, photoengraving. This important part of allowing the people to see as well as read requires workmen of the greatest skills. These skills have been acquired and passed on from one workman to another over the years. This method of acquainting new people in the industry with the intricacies of the photoengraving trade is called apprenticeship.

The need for closer attention to the apprenticeship within the photoengraving industry is recognized by the memberships of the American Photoengravers Association and the International Photo-Engravers' Union of North America. Consequently, these two organizations have joined cooperatively in the development of these National Standards of Apprenticeship.

It is the intent of the organizations that this document be recognized and used as a guide in the development of highly skilled journeymen through the methods of apprenticeship in local communities.

It is hoped this system and basic fundamentals can be followed in all communities. This is suggested with recognition that each and every community is different and each and every plant is somewhat different. Adjustments to meet local conditions can readily be made by a Joint Apprenticeship Committee of employees and employers who are familiar with such conditions.

NATIONAL APPRENTICESHIP STANDARDS for COMMERCIAL ESTABLISHMENTS in THE PHOTOENGRAVING INDUSTRY

DEFINITIONS

The term "Employer" shall mean any employer who subscribes to the terms and conditions of standards prescribed by the Local Joint Apprenticeship Committee and who has the facilities and equipment to properly train apprentices.

The term "Union" shall mean any Local Union of the International Photo-Engravers' Union of North America.

The term "Apprentice" shall mean a person who has signed an Apprenticeship Agreement with an employer to learn the photoengraving trade as outlined in these standards.

The term "Apprenticeship Agreement" shall mean a written agreement between an employer and the person employed as an apprentice, which agreement shall be registered by the Registration Agency.

The term "Committee" shall mean the Local Joint Apprenticeship Committee usually composed of three members representing the employer and three members representing the Union, plus one alternate member from each group to act in the absence of a regular member and the alternate shall be privileged to attend all meetings of the Committee.

The term "Registration Agency" shall mean the State Apprenticeship Council, or in States where there are no councils, the Federal Committee on Apprenticeship, United States Department of Labor.

The term "Standards" shall mean the Apprenticeship Training System.

ORGANIZATION OF THE COMMITTEE

The Committee shall determine the time and place of regular meetings, or meet on call of the Chairman, who shall be required to issue such call upon request of any two members of the Committee.

The Committee shall establish such rules and policies governing its administrative procedure as are required.

Consultants—The Committee will utilize the services of individuals and representatives of agencies or organizations specializing in apprenticeship.

DUTIES OF THE COMMITTEE

A. To determine the shop facilities available for acquiring the necessary experience on the job.
B. To establish minimum standards required for shop experience and related instruction for apprentices.
C. To establish standards for appraisals to determine progress of apprentices in manipulative skills and technical knowledge.
D. To establish standards for examination of apprentices, and upon apprentices passing such examination to recommend to the Registration Agency that Certificates of Completion of Apprenticeship be awarded.
E. To prepare standards and agreements for submission to the Registration Agency.
F. To maintain a record-keeping system showing the progress of each apprentice at his work on the job and in his related instruction, and any other records that the Committee shall decide to keep.
G. In general, to be responsible for the successful operation of photoengraving apprenticeship under these standards, by performing the duties listed above, by cooperating with public and private agencies which can be of assistance, by obtaining publicity in order to develop the support and interest of the public in apprenticeship and by keeping in touch with all parties concerned.

QUALIFICATIONS FOR APPRENTICESHIP

Applicants for a photoengraving apprenticeship, not heretofore connected with the trade, must be at least 18 years of age; provided, the Committee may make exceptions to this age limit in exceptional and unusual cases.

Education: Each applicant should have a high school education or its equivalent; provided, the Committee may make exceptions to this requirement for applicants who are war veterans, those with unusual aptitude, previous experience, or other qualifications acceptable to the Committee. The applicant should furnish the employer and the Committee a transcript of his high school courses and grades, if available, for review.

Physical examination: Each applicant shall furnish the Committee evidence of having passed an examination of physical fitness.

Applicants having experience in the trade may be admitted to advanced standing when they demonstrate their qualifications for such credit in a manner satisfactory to the Committee.

TERM OF APPRENTICESHIP

The term of apprenticeship shall not be less than 5 years.

PROBATIONARY PERIOD

Apprentices shall be subject to a probationary period not exceeding 3 months of employment. During this probationary period cancellation of the apprenticeship agreement will be made by the Committee upon request of either party, but due notice shall be given the Registration Agency.

CONTINUITY OF EMPLOYMENT

It shall be the duty and responsibility of the employer to provide, insofar as possible, continuous employment for all apprentices.

APPRENTICESHIP AGREEMENT

All accepted applicants for apprenticeship shall sign an apprenticeship agreement (countersigned by parent or guardian if a minor), which shall also be signed by the employer and others if so decided by the Joint Apprenticeship Committee. Every apprenticeship agreement entered into under an apprenticeship should contain a clause making the standards a part of the agreement with the same force and effect as if written therein. For this reason every interested party shall be furnished with a copy of the standards and given an opportunity to read them before the agreement is signed. The number of copies of an agreement to be signed shall be determined by the Joint Apprenticeship Committee who shall also decide how they are to be distributed.

IDENTIFICATION OF APPRENTICES

Each apprentice, upon signing an apprenticeship agreement, shall be furnished with an identification card.

WORK EXPERIENCE

During his apprenticeship the apprentice shall receive such instruction and experience in the photoengraving process as is necessary to develop a practical and skilled craftsman, versed in the theory and

practices of the craft. He shall also perform such other duties as are commonly related to a photoengraving apprenticeship. The apprentice shall have the right to appeal to the Committee if, in his opinion, he is being given insufficient or improper training. It shall be the duty of the Committee to arrange such adjustments as it deems necessary. The agreement form furnished by the Registration Agency may be used and shall include the schedule of processes.

The trade of Photoengraving embraces separate branches, any and all of which are recognized as apprenticeable and require a minimum of 5 years to learn. These apprenticeship standards take within their scope these branches which are as follows: Photographing, stripping, etching—copper and zinc, finishing, routing, blocking, proofing, tint-laying, masking, and such other branches of work as may be employed.

Apprentices under agreement to learn any one of the above branches of the trade will be taught how to perform all phases of work in that branch as well as a theoretical knowledge of the other branches sufficient to enable the apprentice to understand them.

Following is a break-down of the work processes that come within the scope of each branch. The apprentice shall receive instruction in all phases of the trade sufficient to insure him of becoming a competent craftsman at the completion of his apprenticeship. However, in developing work processes, consideration should be given to the type of work being done and the facilities available for training. The following work processes will be taught apprentices but not necessarily in this order:

PHOTOGRAPHER

Work experiences to be learned on the job	*Related instruction in and out of plant*
Camera operation.	General fundamental knowledge of all processes in all branches of photoengraving.
Camera preparation.	Study of manufacturers' manuals and data on camera, film, emulsions, and plates.
Copy preparation.	Studying formulas and proper mixing of chemicals. Camera adjustments and finished results.
Preparation of sheet film and roll film.	Length of exposure and development.
Light adjustments.	Types of films used.
Camera adjustments.	Types of screens used.
Making of line and halftone negatives using film, wet plate and dry plate.	Care of screens.
Use of screens and filters.	Types of filters.
Mixing and use of chemicals.	Care of art work and copy.
Use of light meters.	Knowledge of copy and color values.
Dark-room developing.	
Care and handling of film and negatives.	
Making color process negatives—from Kodachrome, Carbro prints, and Illustrations.	
Drop-out and stunt photography.	
Making highlight overlays and masks.	
Reworking poor and damaged negatives.	

Work experiences to be learned on the job	*Related instruction in and out of plant*
Rudiments of stripping, printing, and etching.	Working with journeymen in these branches to evaluate a keener sense of photo-mechanical science.

STRIPPER-PRINTER

Use of printing frames.	General fundamental knowledge of all processes in all branches of photo-engraving.
Use of arc lamps.	
Use of plate whirler.	
Preparation of wet plate, emulsion, and film.	Study of manufacturers' manuals and data on lamps, whirler, printing frames, films and plates.
Setting up nonstrip film.	
Cutting and squaring of negatives.	
Stripping straight flats.	
Stripping combinations.	Study of basic characteristics of copper and zinc.
Stripping for double prints or surprints.	
Stripping to register with overlays or blue prints.	Use and care of opaquing brushes and solutions.
Making blue prints.	
Opaquing for drop-outs.	Knowledge of arc lamps.
Opaquing for color separation.	Length of exposure time and results.
Mixing enamels and ink print solutions.	Knowledge of enamels and printing solutions.
Preparation of copper and zinc for coating.	Methods of cleaning glass and metals.
Coating and whirling metals.	
Printing straight flats.	
Printing double prints and printing-in tints.	
Developing of exposed zinc and copper plates.	
Drying and burning of coatings.	
Contact printing of glass negatives on metal.	
Rudiments of photography, copper etching, and zinc etching.	Working with journeymen in these branches to evaluate a keener sense of photo-mechanical science.

ZINC ETCHER

Judging negatives.	Fundamental knowledge of all branches of photoengraving and all processes.
Preparation of plate for etching.	Study manufacturers' manuals and data on metals and etching solutions.
Preparation of acid for etching.	
Checking prints to determine satisfactory for etching.	
Painting up solids and dead metal.	
Application of topping powder.	Judging tonal values of tints and highlights.
Burning in, painting, and cooling of zinc plates.	Problems of shrinkage and undercutting and reasons to avoid.
Use of etching machines.	
Etching in tub and machine—line, halftone, and Ben Day.	
Scum removal.	
Polishing plates.	Basic knowledge of painting solutions.
Painting up for drop-outs.	Information on methods of saving plates partially etched.

Work experiences to be learned on the job	*Related instruction in and out of plant*
Re-etching.	
Making zinc halftones.	Safety information.
Burning in and etching combination copper plates.	
Rudiments of photography, stripping, printing, and finishing.	Working with journeymen in these branches to evaluate a keener sense of photo-mechanical science.

COPPER ETCHER

Analyzing print on metal for the proper etching for tone and depth.	Knowledge of various types of plates, sizes and gage.
Cleaning plates.	Study of manufacturers' manuals and data on copper and etching machines.
Preparation of plates for etching, removing scum, etc.	Knowledge of chemical formulas and uses.
Staging.	Causes of scum and elimination.
Spotting and retouching.	
Use of hydrometer.	
Judgment of negatives.	
Care and use of electric etching machines.	
Preparation of etching solutions.	Etching solutions, their characteristics and graded strength.
Stopping-out unetched portions of plates.	Etching by multiple bath.
Flat etching for depth and tone.	Measuring instruments and their use.
Dipping plates.	
Brushing plates.	
Action of chemicals and acids.	
Determine time needed in solution.	
Determine proper depth and size of dot.	
Burning in enamels.	
Removal of shoulders.	
Use of magnesium chalk to determine tonal value.	Proper use and care of staging brushes.
Staging for tone values and tone separation.	Proper use of crayon to produce hard and soft effects.
Use of crayon.	Study of plates relative to copy.
Blending edges.	Judging for tonal value, highlights, and color value.
Burning-in of enamels.	
Use of chalk remover solution.	
Short etch bath.	
Fine etching of highlights.	
Etching for proper color values of color process plates.	
Rolling up plates for re-etching.	Working with journeymen in these branches to evaluate a keener sense of photo-mechanical science.
Rudiments of photography, stripping, printing, and proofing.	

FINISHER

Care and sharpening of tools.	General knowledge of all processes in all branches of photoengraving.
Selection of proper tool.	Methods of sharpening tools and how to properly care for them.
Checking etched plates with original copy.	

Work experiences to be learned on the job	*Related instruction in and out of plant*
Trimming line plates.	
Repairing damaged plates.	
Removing imperfections from halftone plates.	Operation of hand press for transferring and cutting.
Trimming copper plates.	Study information on all types of metal used in plant.
Burnishing.	
Removal of enamel from plates.	
Outlining.	Publication specifications and color sequences.
Draw tooling and ruling.	
Use of screen tools and cross liners.	
Vignetting.	
Transferring and cutting for register.	
Re-engraving.	
Finishing color process plates to various publication standards.	
Rudiments of photography, etching and proofing.	Working with journeymen in these branches to evaluate a keener sense of photo-mechanical science.

TINT LAYER (Ben Day)

Use and care of Ben Day screens.	Knowledge of Ben Day screens and possible uses.
Cleaning and preparation for mechanical dot application.	Knowledge of tone values and their relations.
Checking prints with copy.	
Painting in.	Knowledge of color values and best uses.
Gumming and opaquing.	
Tint laying.	
Tint removing.	Types and proper use of brushes and inks for painting up.
Analysis of tonal values to be applied to plate for best practical printing results.	
Applying Ben Day screens and other shading mediums to secure tone values required.	
Care and use of rollers used in inking screen.	
Further skill in application of Ben Day screens and other shading mediums for faster operation.	Fundamental knowledge of all processes of all branches of photoengraving.
Ben Day tint laying on proper angle in two or more colors.	
Reversing prints.	
Rudiments of stripping, printing and proofing.	Working with journeymen in these branches to evaluate a keener sense of photo-mechanical science.

ROUTER AND BLOCKER

Operation and care of equipment.	Knowledge of all types of routing machines, planers, saws, beveling machines and cutting tools.
Sharpening and resetting tools.	
Routing zinc.	

Work experiences to be learned on the job	*Related instruction in and out of plant*
Beveling and lining plates.	Knowledge of zinc and working qualities.
Making tint blocks.	
Routing copper, brass and other alloys.	Knowledge of metals used and welding qualities.
Patching various plates.	
Soldering and welding.	
Mounting line and halftone plates.	Study requirements of different mechanical standards by publications.
Assembling plates on blocks.	
Registering color plates on blocks.	Study of manufacturers' manuals on machines and metals.
Squaring and trimming blocks planing for type high.	Types of nailing machines.
Soldering and patching.	Types of woods and care in handling and storage.
	Study of other types of mounting.
Rudiments of etching and finishing.	Working with journeymen in these branches to evaluate a keener sense of photo-mechanical science.

PROOFER

Operation and care of presses.	Study of manufacturers' manuals on presses, paper, and inks.
Care of rollers and printing inks.	
Use of overlays and underlays.	Types of inks and paper.
Checking proofs with copy.	Publication specifications.
Single color proofing.	Proper packing for press.
Color proofing and ink sequences.	Relation of various papers and various types of ink.
Registering plates on and off the block.	
Marking proofs for re-etching and additional finishing.	Transparent and opaque printing inks.
Mixing and matching colors.	
Proofing of process color plates—mounted and unmounted with bearers.	Study of color and color values.
	Amount and type of inks for best results.
Making and use of friskets and masks.	Specifications and color sequences for wet and dry proofs.
	Study and full observance of publication standards.
Rudiments of etching, finishing and final printing.	Working with journeymen in these branches to evaluate a keener sense of photo-mechanical science.

RELATED INSTRUCTION

Where possible and practical, provision shall be made for schoolroom instruction of apprentices. Each apprentice shall enroll and attend classes not less than 144 hours per year. Time spent in related instruction shall not be classed as hours of work.

Where no suitable classroom instruction is available or where the number of apprentices is not adequate, the necessary technical instruction will be provided apprentices on the job during the term of apprenticeship.

The Committee shall cooperate upon request with educational authorities in working out courses of study for the apprentices.

The most recent technical publication on photoengraving is Modern Photoengraving by Flader and Mertle, both of whom are well known in the industry. In this book there is reference to a number of other publications dealing with the technical phases of photoengraving. The use of all such publications will be found useful for text and reference material for those engaged in the photoengraving industry.

The local standards should provide:

In case of failure on the part of any apprentice to fulfill his obligations as to school attendance, the Committee may suspend or cancel his agreement; and

The employer agrees to carry out the instructions of the Committee in this respect, and the apprentice and his parent or guardian agree to abide by any such determination of said Committee; and

Each apprentice shall be requested to present his registration and school attendance record as evidence of faithful performance of duty. This record shall be presented to the Committee before each promotion period.

INSTRUCTORS

Apprentices shall be supervised at school by such staff as the educational authorities may provide for them.

The Committee shall recommend the names of men who, in their opinion, are qualified to instruct the apprentice classes, as a means of assisting in the selection of an instructor.

PERIODIC EXAMINATIONS

An examination of apprentices shall be given at such times as are determined by the Committee. In these examinations consideration shall be given to school attendance and daily employment records of the apprentice.

HOURS OF WORK

Work hours for apprentices shall be the same as for the journeymen of the craft who are employed in the shop, and they shall be subject to the other general conditions of employment applicable to journeymen.

WAGE RATES

Apprentice wage rates shall be in accordance with collective bargaining agreements where such apply. In other instances apprentice wage rates shall be in accordance with standards prevailing in the industry in the particular section involved.

RATIO OF APPRENTICES TO JOURNEYMEN

In establishments covered by bargaining agreements the apprentice ratio contained therein shall apply; in other cases the Committee shall determine the ratio in accordance with that generally recognized in the locality involved.

SUPERVISION

The Committee and the employer shall cooperate in designating a particular person (this may be shop superintendent, foreman, or a journeyman) to be known as Supervisor of Apprentices. He shall be responsible for carrying out the apprenticeship and, in collaboration with the foreman, shall arrange for apprentices to be moved from one process to another so they may be given all-around work experience.

GRANTING OF CERTIFICATE OF COMPLETION OF APPRENTICESHIP

The Committee will request the Registration Agency to award Certificates of Completion of Apprenticeship to apprentices who successfully complete the apprenticeship, pass all tests and otherwise fulfill the requirements of these standards.

ADJUSTMENT OF DIFFERENCES

Any disagreement between the parties hereto shall be referred to the Committee whose decision shall be final and conclusive. It is understood this provision applies to apprenticeship problems only.

MODIFICATION OF STANDARDS

These standards may be modified at any time by action of the Committee, subject to approval by participating parties. Such modifications shall not alter apprenticeship agreements in effect at the time of the change without the express consent of the parties to such agreements. Such modifications are to be approved by the Registration Agency.

BARGAINING AGREEMENT

These standards are signed with the understanding that if any difference with the bargaining agreement and these standards should arise, the bargaining agreement shall be paramount.

APPRENTICESHIP AGREEMENT

(Front view)

THIS AGREEMENT, entered into this .... day of....., 19...., between ....., hereinafter referred to as the EMPLOYER, and
(Name of employer)
....., born .....,
(Name of apprentice) (Month) (Day) (Year)
hereinafter referred to as APPRENTICE, and (if a minor) .....
(Name of parent or guardian)
hereinafter referred to as his GUARDIAN.

WITNESSETH that the EMPLOYER, the APPRENTICE, and his GUARDIAN desire to enter into an agreement of apprenticeship and therefore, in consideration of the premises and of the mutual covenants herein contained, do hereby mutually covenant and agree as follows:

That the EMPLOYER shall employ and teach the APPRENTICE the trade or craft of ..... in conformity with the terms and conditions set forth on the reverse side of this agreement and made a part hereof;

That the APPRENTICE shall perform diligently and faithfully the work of the trade or craft during the period of apprenticeship, in conformity with the terms and conditions set forth on the reverse side of this agreement and made a part hereof;

That the GUARDIAN promises that the apprentice will duly perform all obligations undertaken herein;

That the apprenticeship term begins on the .... day of ....., 19...., and terminates upon the completion by the apprentice of ..... (years or hours) of employment for said employer in said trade or craft, as stipulated on the reverse side of this agreement;

That this agreement is subject to approval by a recognized State Apprenticeship Council in the State in which the apprentice is employed, or if no such council exists in the State, by the Federal Committee on Apprenticeship, Bureau of Apprenticeship, U. S. Department of Labor;

That either party may terminate the agreement by submitting written notification of termination to the approving agency; but, if such notification is submitted after completion of the probationary period (stipulated on the reverse side hereof), the reasons for termination shall be given; and

That either party may at any time consult with the approving agency concerning the interpretation of any part of this agreement over which there is a difference.

IN WITNESS WHEREOF the parties hereunto set their hands and seals:

....
(Apprentice) (Employer)
..... By.....
(Address) (Officer)
....
(Guardian) (Address)

Approved on behalf of the .....
(Name of joint apprenticeship committee)
by.....on....., 19....

Registered by.....
(Name of registration agency)
by.....on....., 19....

APPRENTICESHIP AGREEMENT

(Back view)

TERMS AND CONDITIONS

1. Term of Apprenticeship and Period of Probation

2. Major Processes in Which the Apprentice Is To Receive Instruction and Experience

(Under this heading state the different branches of the trade to be taught and the approximate time the apprentice shall work at each branch.)

3. Graduated Scale of Wages To Be Paid the Apprentice

4. Number of Hours Per Day and Total Number of Hours Per Week To Be Worked by the Apprentice

5. Number of Hours of School Instruction Per Year To Be Attended by Apprentice, and Name of School

(144 hours per year is the minimum requirement.)

6. Special Provisions

(Write here any terms and conditions not elsewhere stated in this agreement.)

Prepared and distributed by Bureau of Apprenticeship, U. S. Department of Labor, Washington, D. C.

Certificate of Apprenticeship
STATE OF RHODE ISLAND
Certificate of Completion of Apprenticeship
Certificate of Completion of Apprenticeship
Certificate of Apprenticeship
Certificate of Completion of Apprenticeship
Certificate of Apprenticeship
Certificate of Completion of Apprenticeship
Certificate of Completion of Apprenticeship
STATE OF ARIZONA
Certificate of Apprenticeship
Certificate of Completion of Apprenticeship
Certificate of Apprenticeship

Certificates of Completion of Apprenticeship, awarded to apprentices when they have completed their training, are issued by the State apprenticeship agency or the Federal Committee on Apprenticeship in States in which no such agency is established.

W. K. JAMES, *President*
D. H. MURNIK, *First Vice-Pres.*
PETER SCHOTANUS, *Second Vice-Pres.*
C. G. ROHRICH, *Secy.-Treas.*

AMERICAN PHOTOENGRAVERS ASSOCIATION

GENERAL OFFICES • 166 WEST VAN BUREN STREET • CHICAGO 4 • ILLINOIS

W. K. JAMES, *President*
29 North Sixth Street
Philadelphia 6, Pa.

TO ALL EMPLOYERS IN THE PHOTOENGRAVING INDUSTRY:

The American Photoengravers Association has collaborated with the International Photoengravers' Union of North America in preparing National Standards of Apprenticeship for the Commercial Photoengraving Industry. The purpose of these National Standards is to bring about some uniformity within the industry on this important matter. It is anticipated that these standards, as a guide, will be of assistance to everybody concerned in the development of competent craftsmen to staff our plants.

Ours is an industry which involves, now more than ever before, considerable investment in expensive machinery, equipment and materials, and one in which technological advancements are constantly taking place. So that we may operate our plants profitably we must have proficient craftsmen to perform the high skills of the trade. It is essential that both employers and craftsmen keep abreast of the trends in the industry so that we may uniformally produce the high quality products demanded of us and required by our customers.

We are convinced that a sound apprenticeship system is necessary for our continued success and that the establishment of such a system as outlined herein will redound to the benefit of the Commercial Photoengraving Industry and every person employed in the production of photoengravings for letterpress printing.

Very truly yours,

Wallaston K. James

Wallaston K. James, President

INTERNATIONAL Photo-Engravers' Union OF NORTH AMERICA

I.P.E.U.

CHARTERED A. F. OF L. MAY 20, 1904
ORGANIZED OCT. 22, 1900

EDWARD J. VOLZ, PRESIDENT
MATTHEW WOLL, 1ST VICE-PRES.
FRED R. BALLBACH, 2ND VICE-PRES.
FRANK D. SMITH, 3RD VICE-PRES.
WILFRID T. CONNELL, 4TH VICE-PRES.
WILLIAM H. GRAF, 5TH VICE-PRES.
HENRY F. SCHMAL, SEC'Y-TREAS

OFFICE OF PRESIDENT
ROOM 1110
292 MADISON AVENUE • • NEW YORK 17, N. Y
TELEPHONE LEXINGTON 2-4203

June 3, 1949

To Officers and Members of Local Unions,
International Photo-Engravers' Union of N. A.

Greetings:

Within a few days we plan forwarding copies of NATIONAL APPRENTICESHIP STANDARDS for the COMMERCIAL BRANCH of the PHOTO-ENGRAVING INDUSTRY. These Standards were jointly formulated by the Executive Committee of the American Photo Engravers Association and the Executive Council of this International Union in cooperation with the Bureau of Apprenticeship of the United States Department of Labor, which has given its approval.

These are basic Standards and subject to modification through local agreement. They are presented for consideration by local unions and employer groups in the industry interested in the adoption of joint apprentice-training programs. Likewise in instances where previously adopted Standards are to be reconsidered or revised.

The Standards as submitted, will where adopted prove a sound and progressive procedure for apprentice training.

With best wishes, I remain

Fraternally yours,

Edward J. Volz

Edward J. Volz, President
INTERNATIONAL PHOTO-ENGRAVERS' UNION OF N. A.

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OEIU
#153

UNITED ★ STATES ★ OF ★ AMERICA ★

FEDERAL COMMITTEE ON APPRENTICESHIP

Certificate of Registration

Apprenticeship Standards

This certifies that the program of apprenticeship named below has been registered as part of the National Apprenticeship Program in accordance with the standards recommended by the

Federal Committee on Apprenticeship

NATIONAL APPRENTICESHIP STANDARDS FOR COMMERCIAL ESTABLISHMENTS IN THE PHOTO-ENGRAVING INDUSTRY
(Jointly Sponsored by The American Photo-Engravers' Association)
(and The International Photo-Engravers' Union of North America)
for the trade classification of

Name PHOTO-ENGRAVER

City

State Nation Wide

Date August 1, 1949

Registry No. 72261-A

Wm J. Patterson

Director, Apprentice-Training Service

U. S. Department of Labor

U. S. GOVERNMENT PRINTING OFFICE 16—47287-1

REGIONAL AND FIELD OFFICES
BUREAU OF APPRENTICESHIP
U. S. DEPARTMENT OF LABOR

For information regarding the services of field representatives of the Bureau of Apprenticeship in the establishment of apprenticeship systems communicate with the nearest office listed below:

REGION I

(Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.)

Regional Office

Joseph E. Johnson, Regional Supervisor,
Bureau of Apprenticeship,
Room 501, 18 Oliver Street,
Boston 10, Mass.

Field Offices

Connecticut:
- Bridgeport: Room 310, Post Office Building.
- Hartford: Room 1005, 983 Main Street.
- New Haven: Room 408, 746 Chapel Street.
- New London: Room 310, Post Office Building.
- Stamford: Room 12, Post Office Building.
- Waterbury: Room 210, Post Office Building.

Maine:
- Portland: 303 Courthouse, 156 Federal Street.
- Waterville: Wein Building, 137 Main Street.

Massachusetts:
- Lawrence: Room 36, Gleason Building, 349–353 Essex Street.
- Pittsfield: 210 Post Office Building.
- Springfield: Room 404, 1694 Main Street.
- Worcester: Room 333, Post Office Building.

New Hampshire:
- Manchester: Room 613, 875 Elm Street.

Rhode Island:
- Providence: East Providence Post Office Building.

Vermont:
- Burlington: Room 10, Union Station.

REGION II

(New York State)

Regional Office

John M. Marion, Regional Supervisor,
Bureau of Apprenticeship,
Room 1318, 270 Broadway,
New York 7, N. Y.

Field Offices

New York:
- Albany: Room 711, 112 State Street.
- Binghamton: Room 203, U. S. Post Office Building.
- Buffalo: Room 230 Hurst Building, 47 West Huron Street.
- Jamestown: 311 East Second Street.
- Mineola: Room 203, Post Office Building, Main and First Streets.
- Niagara Falls: Room 204, U. S. Post Office Building.

New York—Continued
Rochester: Room 401, 70 Exchange Street.
Syracuse: 1010 Chimes Building, 500 South Salina Street.
Troy: 213 Fifth Avenue.
Utica: Room 418, % N. Y. State Department of Labor, 258 Genessee Street.

REGION III

(Delaware, New Jersey, Pennsylvania)

Regional Office

Thomas P. Kenney, Regional Supervisor,
Bureau of Apprenticeship,
Room 712, Widener Building,
Juniper and Chestnut Streets,
Philadelphia 7, Pa.

Field Offices

Delaware:
Wilmington: Room 103, U. S. Customs House, Sixth and King Streets.
New Jersey:
Camden: 538 Broadway.
Newark: 930 Essex Building, 31 Clinton Street.
Trenton: Room 251–B Federal Building.
Pennsylvania:
Allentown: Room 20, U. S. Post Office Building, Fifth and Hamilton Streets.
Altoona: % Pennsylvania State Employment Service, 1709 Union Avenue.
Erie: 128 Federal Building.
Harrisburg: 601 Feller Building, Third and Market Streets.
Oil City: % Pennsylvania State Employment Service, Drake Building, 325 Seneca Street.
Pittsburgh: 404 Arrott Building, Fourth Avenue and Wood Street.
Pennsylvania—Continued
Pottsville: % Pennsylvania State Employment Service, 394 South Centre Street.
Reading: % Pennsylvania State Employment Service, Front and Penn Streets.
Scranton: Room 331, U. S. Post Office Building.
Wilkes-Barre: % Pennsylvania State Employment Service, 5 East Market Street.
Williamsport: % Pennsylvania State Employment Service, 228–230 Pine Street.
York: 239 North George Street, % P. S. E. S.

REGION IV

(District of Columbia, Maryland, North Carolina, Virginia, West Virginia)

Regional Office

Robert F. Handley, Regional Supervisor,
Bureau of Apprenticeship,
Room 1450, Temporary "U" Building,
Twelfth and Constitution Avenue NW.,
Washington 25, D. C.

Field Offices

District of Columbia: Washington: Room 416, 499 Pennsylvania Avenue, NW.
Maryland:
Baltimore: Room 316, Appraisers' Stores, 103 South Gay Street.
Hagerstown: 111 South Potomac Street.
Silver Spring: American Legion Home, 903 Sligo Avenue.
North Carolina:
Charlotte: Room 1316, Independence Building.
Raleigh: 509 Caswell Building.
Winston-Salem: 805 North Liberty Street.

Virginia:
- Norfolk: 416 Royster Building.
- Richmond: Room 301, 205 West Grace Street.
- Roanoke: Room 301, School Administration Building.

West Virginia:
- Charleston: Room 102, Federal Building.
- Clarksburg: Room 317, Post Office Building.
- Wheeling: 114 Fidelity Building.

REGION V

(Kentucky, Michigan, Ohio)

Regional Office

John R. Newland, Regional Supervisor,
Bureau of Apprenticeship,
506 Ninth-Chester Building,
Cleveland 14, Ohio.

Field Offices

Kentucky:
- Lexington: 176 North Mill Street.
- Louisville: 423 South Fifth Street.

Michigan:
- Battle Creek: 408 Michigan National Bank Building, 1 West Michigan Avenue.
- Detroit: Room 304, Owens Building, 250 West Lafayette Boulevard.
- Grand Rapids: 1208 Peoples National Bank Building.
- Lansing: Room 208, 602 North Washington Avenue.
- Saginaw: 218 Graebner Building, 120 North Michigan Avenue.
- Sault Ste. Marie: 304 Central Savings Bank Building.

Ohio:
- Akron: % O. S. E. S., Third Floor, 33 North Main Street.
- Canton: Room 215, Dime Savings Bank Building.
- Cincinnati: Room 411 B, Post Office Building and Court House.

Ohio—Continued
- Cleveland: 830 Standard Building.
- Columbus: 418 New Federal Building.
- Dayton: 609 Municipal Building, Third and Ludlow Streets.
- Lima: 205 Old Dominion Building.
- Newark: Room 1010, Newark Trust Building.
- Portsmouth: Room 4, Post Office Building.
- Toledo: Room 11–A, Old Federal Building.
- Youngstown: 515 Union National Bank Building.

REGION VI

(Illinois, Indiana, Wisconsin)

Regional Office

Cecil L. Utterback, Regional Supervisor,
Bureau of Apprenticeship,
Room 404, 226 West Jackson Boulevard,
Chicago 6, Ill.

Field Offices

Illinois:
- Alton: Post Office Building.
- Joliet: Room 412 Morris Building, 58 North Chicago Street.
- Moline: 1630 Fifth Avenue.
- Mount Vernon: 118½ North Tenth Street.
- Peoria: 731 First National Bank Building.
- Rockford: Room 201 Gateway Building, 121 Seventh Street.
- Springfield: 514½ East Monroe Street.

Indiana:
- Evansville: 310 Post Office Building.
- Fort Wayne: 203 Purdue University Center, 220 East Jefferson Street.
- Gary: 307 East Fifth Avenue.
- Indianapolis: 911 North Pennsylvania Street.
- Lafayette: 658 East Main Street.

Indiana—Continued
Marion: 316 East Fourth Street.
South Bend: 216 North Michigan Street.
Terre Haute: 307 Federal Building.
Wisconsin:
Green Bay: 302 Post Office Building.
La Crosse: 216 Post Office Building.
Madison: Room 211 State Office Building.
Milwaukee: % Industrial Commission, 623 North Second Street.
Oshkosh: Room 204, Post Office Building.
Racine: Room 405, Arcade Building, 423 Main Street.
Wausau: Bluhm Building, 124 Washington Street.

REGION VII

(Alabama, Florida, Georgia, Mississippi, South Carolina, Tennessee)

Regional Office

Charles N. Conner, Regional Supervisor,
Bureau of Apprenticeship,
Room 921, Grant Building.
Atlanta 3, Ga.

Field Offices

Alabama:
Birmingham: 1212 Comer Building.
Mobile: 129 Federal Building.
Montgomery: 303 Old Post Office Building.
Sheffield: 414½ Montgomery Avenue.
Florida:
Jacksonville: Room 443, Post Office Building.
Miami: 716 Seybold Building.
Orlando: 42 East Central Ave., Old Post Office Building.
Tallahassee: Room 121, Caldwell Building, Madison Street.
Tampa: Room 904, Wallace S Building, 608 Tampa Street.
Georgia:
Atlanta: Room 1018, Grant Building.
Columbus: Room 243, Martin Building, 1320 Broadway.
Savannah: 402 Blun Building.
Mississippi:
Jackson: 425½ South State Street.
Meridian: 221 Pythian Building.
South Carolina:
Charleston: Room 222, The Center.
Columbia: 208 Owen Building.
Spartanburg: 211 Montgomery Building.
Tennessee:
Chattanooga: Room 217, Federal Building.
Knoxville: Room 308, Cherokee Building, 400 West Church Avenue.
Memphis: Third Floor, Dillard Building, 122 Union Street.
Nashville: 401 Presbyterian Building, 152 Fourth Avenue North.

REGION VIII

(Iowa, Minnesota, Nebraska, North Dakota, South Dakota)

Regional Office

Cecil L. Utterback, Regional Supervisor,
Bureau of Apprenticeship,
410 Pence Building,
730 Hennepin Avenue,
Minneapolis 3, Minn.

Field Offices

Iowa:
Burlington: Room 523, Tama Building.
Cedar Rapids: 209 Post Office Building.
Davenport: Rooms 312–313, Post Office Building, 131 East Fourth Street.
Des Moines: Room 310, 1011 Locust Street.

Iowa—Continued
Mason City: Room 16, Post Office Building.
Sioux City: 308 Federal Building.
Waterloo: % Veterans' Administration, Masonic Temple Building, East Park and Mulberry Streets.
Minnesota:
Duluth: 212 Bradley Building.
Mankato: % M. S. E. S., 635 South Front Street.
St. Cloud: % M. S. E. S., 706 St. Germain Street.
St. Paul: Ashton Building, 1547 University Avenue.
Nebraska:
Lincoln: % N. S. E. S., 1213 North Street.
Omaha: 201 Two-Ten Building.
North Dakota:
Fargo: % N. D. S. E. S., 630 First Avenue, North.
South Dakota:
Aberdeen: 503 Capitol Building, 417 South Main Street.
Huron: 201 Post Office Building, 410 Dakota, South.

REGION IX

(Arkansas, Kansas, Missouri, Oklahoma)

Regional Office

Taylor F. Custer, Regional Supervisor,
Bureau of Apprenticeship,
1509 Fidelity Building,
Kansas City 6, Mo.

Field Offices

Arkansas:
Fort Smith: Room 111, Federal Building.
Little Rock: 201 Post Office Building.
Kansas:
Topeka: 642 New England Building.
Wichita: 308 Derby Building, 352 North Broadway.
Missouri:
Kansas City: 1510 Fidelity Building, 911 Walnut St.
St. Joseph: % M. S. E. S., 114½ South Eighth Street.
St. Louis: Room 507, New Federal Building, Twelfth and Market Streets.
Springfield: 246 Wilhoit Building.
Oklahoma:
Oklahoma City: 411–412 Oklahoma Natural Building, Third and Harvey Avenue.
Tulsa: 916 Daniel Building, 103 East Third Street.

REGION X

(Louisiana, New Mexico, Texas)

Regional Office

Travis J. Lewis, Regional Supervisor,
Bureau of Apprenticeship,
Room 1806, 1114 Commerce Street,
Dallas 2, Tex.

Field Offices

Louisiana:
Baton Rouge: 618 Third Street.
Lake Charles: 432 Kirby Street.
New Orleans: 127 Elk Place.
Shreveport: 327 Crockett Street.
New Mexico:
Albuquerque: Room 413, Federal Building.
Santa Fe: U. S. Court House, Room 5, Basement.
Texas:
Austin: 1709 San Antonio Street.
Beaumont: 315 Federal Building.
Corpus Christi: Room 307 Old Federal Building, 521 Starr Street.
Dallas: Room 226, 1114 Commerce St.
El Paso: 508 North Kansas Street.
Fort Worth: Room 419, U. S. Court House.

Texas—Continued
Houston: Room 301, Milam Building.
Longview: Room 213, Post Office Building.
Lubbock: 215 Post Office Building.
San Antonio: Room 592, Federal Building.
Waco: 421 Columbus Avenue.

REGION XI

(Colorado, Idaho, Montana, Utah, Wyoming)

Regional Office

Clifford B. Noxon, Regional Supervisor,
Bureau of Apprenticeship,
Room 322–328, Commonwealth Building,
Fifteenth and Stout Streets.
Denver 2, Colo.

Field Offices

Colorado:
Colorado Springs: 14 South Nevada Avenue.
Grand Junction: Box 936, Post Office Building.
Greeley: % Colorado State Employment Service, 615 Eighth Avenue.
Pueblo: 409 Court Street.
Idaho:
Boise: 209 Continental Bank Building.
Coeur d'Alene: Room 207, Harding Building, Fifth and Sherman Streets.
Montana:
Great Falls: First Floor, City Hall.
Helena: 102 East Sixth Avenue.
Utah:
Ogden: 404 Eccles Building.
Provo: 45 North University Avenue.
Salt Lake City: Room 215 Terminal Building, 222 Southwest Temple Street.
Wyoming:
Casper: Room 223, 124 West Second Street.

REGION XII

(Arizona, California, Nevada, Oregon, Washington)

Regional Office

Broncel R. Mathis, Regional Supervisor,
Bureau of Apprenticeship,
Room 417, Federal Office Building,
Civic Center, Fulton and Leavenworth Streets,
San Francisco 2, Calif.

Field Offices

Arizona:
Phoenix: Room 511, Heard Building, 112–120 North Central Avenue.
Tucson: 90 North Church Street, Room 10.
California:
Fresno: 2308 Ventura Avenue.
Long Beach: 617 Jergins Trust Building, 100 East Ocean Boulevard.
Los Angeles: Room 1107, 1206 Santee Street.
Oakland: Room 520, 577 Fourteenth Street.
Sacramento: 631 Jay Street.
San Diego: 301 West G Street.
San Francisco: Room 421, Federal Office Building.
Santa Monica: 1920 Main Street.
Nevada:
Reno: Room 218, Professional Building.
Oregon:
Eugene: 610 Willamette Street.
Medford: Federal Office Building, 33 North Riverside Avenue.
Pendleton: 142 Southeast First Street.

Oregon—Continued
Portland: Room 307, U. S. Court House (Old).
Washington:
Longview: Room 216, P. O. Building.
Seattle: 602 American Building, Second Avenue and Madison Street.
Spokane: 614 Empire State Building, West 905 Riverside Avenue.
Tacoma: 519 Provident Building.
Washington—Continued
Yakima: 321–323 East Yakima Avenue, 406 Masonic Temple Building.

TERRITORY

Alaska:
Juneau: 409–41 Territorial Post Office Building, P. O. Box 1030.
Hawaii:
Honolulu: 343 Federal Building.

NATIONAL CONSULTANT ON APPRENTICESHIP IN PHOTOENGRAVING INDUSTRY

Edward E. Goshen, *Assistant Director*
Bureau of Apprenticeship
U. S. Department of Labor
Washington 25, D. C.

STATE APPRENTICESHIP AGENCIES

(Including names of full-time directors)

Alaska Apprenticeship Council,
Department of Labor,
Juneau, Alaska.

Arizona Apprenticeship Council,
Industrial Commission,
Phoenix, Arizona.*

Archie J. Mooney, Chief, Division of Apprenticeship Standards,

California Apprenticeship Council,
Department of Industrial Relations,
San Francisco, Calif.*

Tom Yoczik, Chief, Apprentice Training Division,

Connecticut Apprenticeship Council,
Department of Labor and Factory Inspection,
Hartford, Conn.

Gino J. Simi, Director of Apprenticeship,

District of Columbia Apprenticeship Council,
District of Columbia Board of Commissioners,
Washington, D. C.*

John Vandillon, Executive Secretary,

Florida Apprenticeship Council,
Industrial Commission,
Tallahassee, Fla.*

Abner N. Deane,
Director of Apprenticeship,

Hawaii Apprenticeship Council,
Department of Labor and Industrial Relations,
Honolulu, T. H.*

Iowa Apprenticeship Council,
Bureau of Labor,
Des Moines, Iowa.

Kansas Apprenticeship Council,
Labor Department,
Topeka, Kans.

Kentucky Apprenticeship Council,
Department of Industrial Relations,
Frankfort, Ky.*

R. I. Conran, Director Apprenticeship Division,

Louisiana Apprenticeship Council,
Department of Labor,
Baton Rouge 4, La.*

Maine Apprenticeship Council,
Department of Labor and Industry,
Augusta, Maine.*

Hubert L. Connor, Director,
Division of Apprentice Training,

Massachusetts Apprenticeship Council,
Department of Labor and Industries,
Boston, Mass.*

Frank Musala, Director,
Division of Voluntary Apprenticeship,

Minnesota Apprenticeship Council,
Industrial Commission,
St. Paul, Minn.*

Montana Apprenticeship Council,
Department of Agriculture, Labor, and Industry,
Helena, Mont.*

Nevada Apprenticeship Council,
Department of Labor,
Carson City, Nev.*

New Hampshire Apprenticeship Council,
Bureau of Labor,
Concord, N. H.*

New Mexico Apprenticeship Council,
Labor and Industrial Commission,
Albuquerque, N. Mex.*

*State apprenticeship law enacted.

John J. Sandler, Director of Apprenticeship,
New York State Apprenticeship Council,
Department of Labor,
New York, N. Y.*

Clarence L. Beddingfield, Director of Apprenticeship,
North Carolina Apprenticeship Council,
Department of Labor,
Raleigh, N. C.*

Ohio Apprenticeship Council,
Department of Industrial Relations,
Columbus, Ohio.

Norman O. Nilsen, Director of Apprenticeship,
Oregon Apprenticeship Council,
Bureau of Labor,
Portland, Oreg.*

Pennsylvania Apprenticeship Council,
Department of Labor and Industry,
Harrisburg, Pa.

Quintin Gonzales Rodriguez, Director,
Apprenticeship Division,
Department of Labor,
San Juan, P. R.*

Rhode Island Apprenticeship Council,
Department of Labor,
Providence, R. I.

Utah Apprenticeship Council,
Utah Industrial Commission,
Salt Lake City, Utah.*

Vermont Apprenticeship Council,
Department of Industrial Relations,
Montpelier, Vt.*

Robert H. Wilson, Director,
Division of Apprenticeship Training,
Virginia Apprenticeship Council,
Department of Labor and Industry,
Richmond, Va.*

John E. Vance, Supervisor of Apprenticeship,
Washington Apprenticeship Council,
Department of Labor and Industries,
Seattle, Wash.*

Walter Simon, Supervisor of Apprenticeship Department,
Wisconsin Industrial Commission,
Madison, Wis.*

*State apprenticeship law enacted.

OTHER PUBLICATIONS AVAILABLE

Copies of any of the following publications may be obtained by writing to the nearest regional or field office listed in this pamphlet, or to Bureau of Apprenticeship, U. S. Department of Labor, Washington 25, D. C.

NATIONAL APPRENTICESHIP STANDARDS FOR PHOTO-ENGRAVERS IN THE NEWSPAPER PUBLISHING BUSINESS: 28-page booklet containing national apprenticeship standards for the guidance of employers and labor in the newspaper publishing business in establishing and conducting systems of apprentice training. Includes provisions of an apprenticeship program, and functions of local joint apprenticeship committees.

THE NATIONAL APPRENTICESHIP PROGRAM: Review of development of apprenticeship in this country and how apprenticeship systems are established. Explanation of functions of Bureau of Apprenticeship, Federal Committee on Apprenticeship, State apprenticeship agencies, National, State and local apprenticeship committees.

APPRENTICE TRAINING FOR RETURNING SERVICEMEN: Explains simply the essential points veterans want to know about apprenticeship.

APPRENTICESHIP CREDIT FOR PREVIOUS EXPERIENCE: Discusses credit for previous experience given apprentices on apprenticeship term, and how credit is determined. Of primary interest to those directly concerned with this aspect of apprenticeship.

EVALUATING APPRENTICES: A 20-page technical booklet containing two articles entitled, respectively, "The Cost of Training and Value of Production of Apprentices," and "Apprentice Record Cards." Of special interest to training directors and others directly in charge of apprentice training.

CRAFT TRAINING—YESTERDAY AND TODAY: The development of apprenticeship in the United States since Colonial days is reviewed in this 4-page review which contrasts the early apprentice indentures with today's apprenticeship agreement, the modern version of the original indentures. Explained in the article are the transitions in methods and practices of apprentice training prior to and following the industrial revolution, and since the enactment by Congress in 1937 of the national apprenticeship law. Reprinted from the American Vocational Journal.

OCCUPATION STATISTICS OF REGISTERED APPRENTICES: 12-page statistical study of 233,300 apprentices employed in each skilled trade in the beginning of 1949 in programs registered with State apprenticeship agencies or the Bureau of Apprenticeship. Occupation data are presented in a series of tables under major and minor trade groupings.

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